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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/486,744	03/01/2000	YVES TROUILHET	AD6530	9833

23906 7590 06/18/2002

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WILMINGTON, DE 19805

EXAMINER

HON, SOW FUN

ART UNIT PAPER NUMBER

1772

DATE MAILED: 06/18/2002

7

Please find below and/or attached an Office communication concerning this application or proceeding.

MF-7

**Office Action Summary**

Application No.

09/486,744

Applicant(s)

TROUILHET, YVES

Examiner

Sow-Fun Hon

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 26 March 2002.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Response to Amendment***

1. The 35 U.S.C. 112, 2<sup>nd</sup> paragraph and 103(a) rejections of claims 1-7 in Paper # 5 (mailed 12/20/01) have been withdrawn due to Applicant's amendment in Paper # 6 (filed 03/26/02).

***New Rejections***

***Claim Rejections - 35 USC § 112***

2. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In independent claim 1, it is unclear how the oxygen barrier property in units of  $\text{cc/m}^2 \cdot \text{day} \cdot \text{atm}$  corresponds with the one in units of  $\text{cc-mil}/100 \text{ in}^2 \cdot \text{day} \cdot \text{atm}$ , and how the water vapor barrier property of  $\text{g/m}^2 \cdot \text{day}$  at 38 °C and 90 % relative humidity corresponds to the one in units of  $\text{g-mil}/100 \text{ in}^2 \cdot \text{day}$  at 23 °C and 95 % relative humidity.

***Claim Rejections - 35 USC § 103***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-4, 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Parks et al.

Parks et al. teaches a paperboard laminate wherein an embodiment shows a laminate (sandwich structure) of tie layer/amorphous nylon/adhesive (tie) layer coextruded onto the inner surface of the paperboard (column 3, lines 15-20) and thus reads on the packaging material of

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both claims 5 and 6 since the final laminate is the same whether layers (b layer of grafted ethylene copolymer) and (c layer of amorphous nylon) are individually extruded or coextruded onto layer (a of paper). Parks et al. teaches that the adhesive (tie) layer is an anhydride (maleic) grafted (modified) ethylene (ethyl/methyl/butyl) acrylate with a basis weight of 3.2 to 13 g/m<sup>2</sup>. Parks et al. teaches that the claimed ethylene vinyl acetate, ethylene-acid copolymer adhesive materials are well known in the art as demonstrated by the cited patents incorporated by reference (column 4, lines 45-60).

The amorphous nylon is preferred due to its being suitable for coextrusion coating (column 4, lines 35-45) and that the basis weight is 6.5 to 60 g/m<sup>2</sup> (4-12 lbs/ream). Parks et al. teaches that nylon 6 and nylon 66 are individually unsuitable (column 4, lines 40-45), suggesting to one of ordinary skill in the art that the crystallinity should be disrupted by blending with the amorphous nylon for a desired variation in physical properties. Because Parks teaches that the amorphous nylon Selar PA 3426 has an oxygen permeability of 0.24 cc.mil/100 in<sup>2</sup>.day.atm (column 7, lines 35-55), it is the examiner's position that the claimed oxygen barrier property in terms of cc/m<sup>2</sup>.day.atm is met by the laminate comprising amorphous nylon of Parks.

Furthermore, it is the examiner's position that the claimed water vapor barrier between 100 and 1000 g/at 38 °C and 90 % relative humidity is also met by the laminate comprising amorphous nylon of Parks.

5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Parks et al. as applied to claims 1-4, 6-7 above, and further in view of Zabrocki.

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Parks et al. teaches the packaging material, but fails to teach that the adhesive layer of ethylene copolymer further comprises up to 40 weight % of a copolyether, copolyetheramide or a polyurethane thermoplastic.

Zabrocki teaches adhesives which have unexpected synergistic increase in strength values over those of the individual components and yet are coextrudable (column 9, lines 30-60). The adhesive blends comprise from about 20 to about 80 weight percent thermoplastic polyurethane and from about 5 to about 50 weight percent of modified polyolefin (column 3, lines 40-45) wherein the modified polyolefin is taught to be graft olefin copolymers, a specific example being a maleic anhydride grafted ethylene/vinyl acetate copolymer blend (column 11, lines 1-30). Zabrocki teaches that the blends are flexible, have high tensile and tear strength, with good adhesion to a wide variety of plastics, useful in plastic laminating (column 9, lines 60-68).

Because Zabrocki teaches that the blends are flexible, have high tensile and tear strength, with good adhesion to a wide variety of plastics, useful in plastic laminating, it would have been obvious to one of ordinary skill in the art to have used the claimed adhesive blend of polyurethane thermoplastic and maleic anhydride grafted ethylene vinyl acetate copolymer of Zabrocki as the adhesive layer in the invention of Parks et al. in order to obtain a flexible laminate packaging material with good interlaminar adhesion.

#### ***Response to Arguments***

6. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

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*Conclusion*

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication should be directed to Sow-Fun Hon whose telephone number is (703)308-3265. The examiner can normally be reached Monday to Friday from 9:00 AM to 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Harold Pyon, can be reached on (703)308-4251. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9311.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0661.

8H  
06/10/02

  
HAROLD PYON  
SUPERVISORY PATENT EXAMINER  
1772

6/14/02